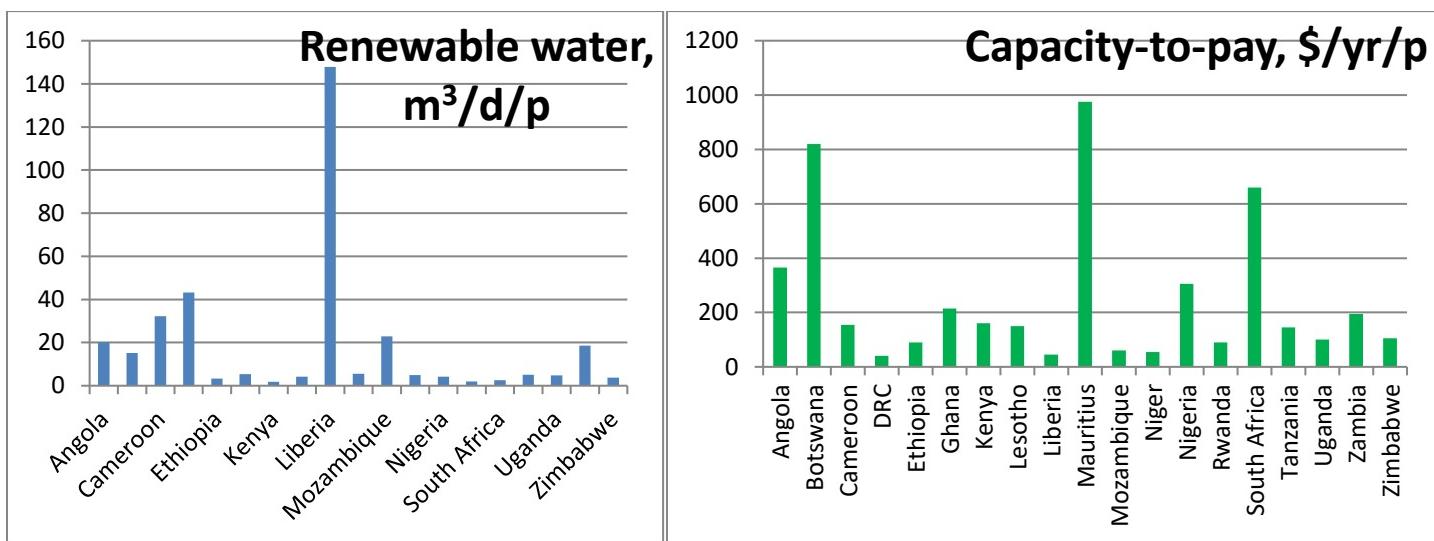


Assessment of public-private partnership potential for water utility in a West African Country

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During fall 2016, a project team assessed the public-private partnership (PPP) potential for water utility in a Western African country. The team consisted of a European PPP expert, a Southeast Asian water-resources specialist, and an American water utility engineer. The assessment sponsor required that PPP options be assessed for three partially completed town water utility systems and three potentially additional water utility systems.

It's noteworthy that: the country's reported median annual income per person is only \$900; the average annual rainfall is approximately eight meters; and everyday people obtain their water from

rooftop water harvesting, storage cisterns, and local springs and wells at little or no operational costs. The international guideline for capacity-to-pay (CTP) for water is only five percent of annual income, or in this case about \$45/year. The estimated operation and maintenance (O&M) cost of each of the three water utility sites is approximately \$25 to \$50/month. This does not include replacements and repairs to these systems which were built without redundancies or backups, but providing water only to outdoor water kiosks.

The team performed these tasks:

- visited the three existing *utility sites*;
- collected and compiled and evaluated utility architectural and engineering (A&E) data, agency and donor reports, and media information;
- met with and interviewed representatives of the A&E, government agencies responsible for planning, implementing and managing water and wastewater utilities, European and American donors, chambers of business and commerce, energy and solid waste utilities, international and local banks and lenders and investors, and non-governmental and non-profit organizations active in water and wastewater sectors;
- conducted focus group and small surveys of local water consumers; and
- performed financial and economic analyses and sensitivity analysis of various scenarios over a 30-year utility horizon based on initial and annual capital costs (CAPEX), operations and maintenance costs (OMEX), and cash incomes (CASHIN) under reasonable assumptions of inflation, debt service, depreciation and amortization.

The financial analyses were very unfavorable for sustainability or to attract PPPs. They indicated: 1. the CTP was far below the OMEX; and 2. the only financial way to keep these utilities viable was through indefinite donor subsidies. The government agency responsible for water supply suggested they make it illegal for water consumers to harvest and use their rooftop rainwaters, storage cisterns, and local springs and hand-dug wells, but this would be politically and culturally unpopular and still would not fill the gap between CTP and OMEX.

[However, the team found that there was at least one reportedly successful water utility. That is, its monthly CASHIN reportedly exceeded its OMEX at least in the six months of its service. It was established by a European NGO using their donated drilling rig, diesel generators, distribution pipes, etc. and volunteered labor. The utility was operated by a community women's group with hired part-time mechanics and technicians.]

This old saw seems to apply: "Why buy a cow when milk is free?"